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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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09/057,016 04/07/98 TURPEN

EXAMINER

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HM12/0402

ART UNIT	PAPER NUMBER
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DATE MAILED:

04/02/99

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 2/3/99

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 17 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☒ Claim(s) 17 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.
☐ received in Application No. (Series Code/Serial Number) _____
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 8
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 17 remains provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 08/324,003. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons presented in the last office action for claims 14-17.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' intent to file a Terminal Disclaimer is noted. The rejection will be maintained until receipt of a properly executed Terminal Disclaimer.

Claim 17 remains rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hamamoto et al, (U.S. Patent 5,618,699), as stated in the last office action for claims 14-17.

No claim is allowed.

Applicants' arguments filed 3 February 1999 have been fully considered but they are not persuasive.

Applicants urge that the rejection of claim 17 under 35 USC 102(e) is improper, given the fact that the claim is merely drawn to the production of a fusion protein by a plant viral vector, wherein the examiner had previously indicated that such subject matter was afforded a filing date which preceded that of the Hamamoto et al patent.

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The Examiner agrees that claims merely drawn to the production of a fusion protein by a viral vector are afforded an effective filing date of 17 February 1989, as stated on pages 2-3 of the last office action and in the personal interview of 4 November 1998. Note that the interview summary of 4 November 1998 is silent with regard to the Examiner's actual interpretation of claim 17. However, it is now considered that claim 17 of the instant application, which is identical to claim 16 of the Hamamoto et al patent, is not merely drawn to the production of a fusion protein.

Claim 17 of the instant application is drawn to a virus particle which comprises both an intact viral coat protein and a fusion protein comprising the coat protein and a foreign protein. Such a virus particle is only possible when the particle comprises a genome comprising a coat protein gene linked to a heterologous protein gene by a leaky stop codon, i.e. readthrough sequence. As the result of such a leaky stop codon, both the native coat protein (as the result of the function of the stop codon) and the fusion protein (as a result of the leakiness of the stop codon) would be produced, resulting in the virus particle of instantly claimed 17 and claim 16 of Hamamoto et al. Thus, claim 16 of Hamamoto et al and instantly claimed 17 inherently comprise the readthrough sequence of the other Hamamoto et al claims. Such a readthrough sequence is only afforded the effective filing date of 14 October 1994 in the instant application, which is more than one year after the effective filing date of Hamamoto et al.

In contrast, a virus particle which comprised only a fusion protein and not a coat protein, which is Applicants' interpretation of Hamamoto et al's claim 16 and instant claim 17, would be

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the result of expression of an ordinary fusion protein gene. Such a gene would not result in the co-production of the coat protein alone.

Furthermore, Applicants have not provided a showing under 37 CFR 1.608(b) as required, as stated in the last office action.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached on (703) 308-3909. The fax phone number for this Group is (703) 308-4242.

March 30, 1999

DAVID T. FOX
PRIMARY EXAMINER
GROUP ~~130~~ 1649

David T. Fox